

PUBLIC HEALTH CLIMATOLOGY*

THE COMMITTEE has observed during the past year a marked growth of interest in the general subject of public health climatology. In August of this year, there occurred an important meeting in Davos, Switzerland, a Congress on Climatology organized by the Davos Institute for Alpine Physiology and Research in Tuberculosis. The printed program of the congress carried 62 formal papers, which were presented in four groups: General Climatology, Physical-Meteorological subjects, Biological Aspects of Climate and Clinical Climatology. The congress was so successful that it has been decided to organize future congresses, one to be held in a different country every third year. The congress was attended by distinguished scientists but unfortunately there were very few in attendance from the United States or from England and France. Davos offers three important centers of interest: first, the observatory of Dr. Dorno, famous for his application of meteorology to biology and medicine; second, the new Swiss Institute under Professor Loewy for the study of tuberculosis and of general physiology under high altitudes; and third, the special climatic conditions and the sanatoria of Davos, famous for the treatment of tuberculosis. The proceedings of the congress will contain numerous significant contributions to meteorology, physiology, hygiene and clinical medicine.

A second item of importance is the development in the United States of the regional organization of the American Meteorological Society.

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The Pacific Coast group of this society held a meeting in June, 1925, at Reed College, Portland, Oregon, at which a number of papers were presented which should be of interest to our members. The paper by Mr. Erwin L. Weber on "Filtered Sunshine" contained a general treatment of the subject of weather in the Pacific Northwest. Mr. Weber likened the climate of this region to that of Northwest Europe in point of cloudiness and pointed out the filtering effect of cloudiness upon the character of sunshine available in this section of the country. He mentioned that a further discussion of the effect of sunlight upon health would be given in Dr. Charles E. Woodruff's forthcoming work on "Medical Ethnology." These observations of the probable effect of direct and filtered sunshine are subject to a check, of course, against the work of Rollier, Dorno, Hess, Leonard Hill and others who have found heliotherapy so healthful for residents of cloudy regions. The recent emergence of heliotherapy as an adjunct in the treatment of rickets justifies further inquiry by members of our Association into the factor of sunlight in the several regional climates of the United States.

The past year has been marked, also, by the appearance of the work by Drs. Leonard Hill and Argyll Campbell of the National Institute for Medical Research in Great Britain. Much attention is being centered in that country upon climatological problems. Prior reports on ventilation and open-air treatment had been issued by the National Medical Research Council. The most recent work embodies the main results of this research. The book deals with impurities and other unfavorable atmospheric conditions (smoke,

dirt, carbon dioxide increase and oxygen decrease, absence of or excessive moisture, excessive heat or cold), the approximation indoors of outdoor conditions, adaptation through suitable clothing to climatic conditions, the common "cold" and some of its climatic auxiliaries, light and its effect upon health, foods and the climatic factor, the skin and the control of body heat, and a general chapter on metabolism in relation to weather conditions. In our country, there is no organized and comprehensive research under way which compares with that being undertaken currently in Great Britain.

This committee recommended several years ago that the development of an Atmospheric Research Institute in this country would be able to make particularly valuable contributions to clinical medicine and to physiological meteorology. Your present committee expects a gradual growth of interest in the subject, however, and eventually there may result a well financed and effective organization for dealing with this important branch of science.

At the present time, responsible research is being carried on in the relation of the common cold to weather elements. Important differences are being observed between the seasonal swing of "colds" in the Eastern United States and on the Pacific Coast. The results of these inquiries, when finished, may be of interest in a general way to students of the respiratory diseases.

Another current inquiry promises to develop some facts on the relation between

suicides and the rapidity of change in temperature, coincidentally with high and stationary atmospheric pressure. The seasonal element in the case fatality rates of the important communicable diseases is also under survey. Winslow's findings nearly 20 years ago for typhoid fever have suggested similar inquiries into the seasonal swing of case fatalities for other diseases—scarlet fever, measles, whooping cough, etc. A further research encouraged largely by your committee is an inquiry into the systematic periodicity of typhoid fever in times past. This research will be made available during the next year. Further coöperation will be extended by your committee to the Committee on the Atmosphere and Man, National Research Council, Dr. Ellsworth Huntington, chairman. It is hoped to complete additional studies of data on daily deaths in New York City in relation to atmospheric elements, and to analyze certain records on industrial production and indoor air conditions. These records were compiled for the National Research Council by a number of manufacturing establishments.

Your committee would again suggest that graduate schools of public health assign students to problems in public health climatology. Stimulating ideas of value in ventilation engineering and in the climatic treatment of certain diseases may result from such research. The field is practically untouched in America.

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